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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/475,719	12/30/1999	W. LEO HOARTY	1436/139	6764

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EXAMINER

HUYNH, SON P

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 05/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/475,719

Applicant(s)

HOARTY, W. LEO

Examiner

Son P. Huynh

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 7-10 have been considered but are moot in view of the new ground(s) of rejection.

Claims 7-10 are rejected in an alternative view of Johnson reference in view of Tindell reference as discussed below.

Applicant argues subscriber interaction is with the local terminal rather than interaction over a data link in the cable television system with a remote interactive process. The local interaction disclosed by Johnson et al. fails to disclose, suggest or teach the interactivity over a data link in the cable television system with an interactive process as taught and claimed by Applicant (page 4, bridge paragraph between page 4 and page 5).

In response, this argument is respectfully traversed. Johnson discloses two way communication cable 6 for downloading television data and other data for display at an associated television receiver and for transmitting data modulated to 25 megahertz by data transmitter for transmission over distribution cable 6 to the head end (including system manager, video modulator, etc. –figure 1, col. 5, lines 6-35) downloaded feature

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data and other data received over the data transmission link (cable 6) via data receiver 203 from the system manager **responsive to processor 206** control (col. 5, lines 50-60). The terminal issues screen requests to the system manager to obtain any screen missing from its memory, which the room occupant may select. a default screen will be displayed while the data is requested from the system manager. When the data is received, it will be displayed (col. 15, lines 20). Thus, Johnson discloses interactivity over a data link in the cable television system (cable 6) with an interactive process (head end that includes manager system).

Applicant further argues even when communication is established with an optional modulator 11, it does not effect change to a signal capable of full motion transmitted to the set top terminal.... In Johnson, data from the modulator is sent over a separate data link or a horizontal or vertical interval that is not capable of full motion video content... the full motion video content of the signal for display on the television is unchanged. Johnson does not disclose the changes get displayed on the television in response to the subscriber interaction (page 5, paragraphs 2-3).

In response, this argument is respectfully traversed. First, it is noted that claim 7 recites the limitations of "... a television input to the home interface controller for receiving a signal **capable** of full motion video..., signal output for providing the signal **capable** of full motion video to the television, wherein the subscriber interaction with the interactive process modifies the full motion video content of the signal **capable** of full

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motion video before..." which is an apparatus claims **functional languages**. Therefore, it is inherent that television input of the receiver over cable 6 in Johnson reference performs the function of receiving a signal capable of full motion..., the signal output to television in Johnson reference performs function of providing the signal capable of full motion..., wherein the subscriber interaction in Johnson reference performs the function of modifying the full motion video content of the signalas claimed in claim 7(see MPEP 2114 - Apparatus and Article Claims- Functional Language). Johnson further discloses system manager at the head end selects channel mapping. The system manager also assigns character generator screen for each channel. In response to subscriber request, the system manager/operator at the head end will either tune to the selected pay per view program/premium channel or not based on user credit, user information (e.g., guest will not receive the premium channel if their current credit is below the price of the movie) – see col. 13, line 40-col. 15, line 11, col. 16, lines 35-68, col. 17, line 30-col. 18, line 38, col. 19, line 64-col. 21, line 37). Johnson further discloses a default screen will be displayed while the data is requested from the system manager. When the data is received, it will be displayed (col. 15, lines 15-20). Johnson also discloses all downstream communications may be transmitted in band or within a particular television channel transmission, for example, within the horizontal or vertical intervals of transmitted video signal. Consequently, the system manager 12 accomplishes in band signaling by controlling data input into the video signals transmitted via either modulators 5 or 11 (col. 4, lines 32-49). Therefore, in response to subscriber interaction, the head end that includes the manager system inherently

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modifies the signal capable of full motion video before it get received by the television signal such as changing to the selected channel carried the selected movie to a free shows, an appropriate screen instead of the selected pay per view movie if the manager system/operators determines that request subscriber does not has enough credit to display the movie, or the system manager/operator changes to full version of the movie after the subscriber purchase the movie with preview version being watched on the screen, or display program in channel associated with assigned screen, display appropriate screen, message based on user information, etc.

For the reasons given above, rejections on claims 7-10, as amended, are discussed as follow.

Claims 1-6 have been canceled.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 7-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Johnson et al. (US 5,001,554).

Regarding claim 7, Johnson discloses a home interface controller (two- way interactive terminal – figures 1, 2) for use with a television (television receiver or TV – figure 2) of a subscriber, wherein the home interface controller is in television communication and data communication with the cable television system (figure 1, col. 5, lines 12-35; col. 15, lines 3-31), the home interface controller comprising:

a data transceiver (up/down converter 201 and data transceiver 203 – figure 2) for data communication with one of a plurality of interactive processes over a data link (6) in the cable television system (converter 201 and data transceiver 203 in data communication with the head end the including system manager, modulator, receiver 3-5, 10-12 – see including, but are not limited to, figure 1, col. 5, lines 5-35, col. 15, lines 3-31);

a selection input (microprocessor 206 – figure 2 and col. 5, lines 42-63) for receiving a data signal from a subscriber selection device (e.g. IR remote 208 or keypad 216 – figure 2) that permits subscriber selection and interaction with the interactive process over the data link (6) (see including, but is not limited to figures 1,2, col. 5, lines 42-63; col. 15, lines 3-31);

Johnson discloses the head end comprises system manager/operator that controls signals transmitted over cable 6 to the terminal and data displayed on the

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screen via the output to the television (see including, but is not limited to, figure 2, col. 15, line 4-col. 16, line 68). Since claim 7 recites "... a television input to the home interface controller for receiving a signal **capable** of full motion video..., signal output for providing the signal **capable** of full motion video to the television, wherein the subscriber interaction with the interactive process modifies the full motion video content of the signal **capable** of full motion video before..." which is an apparatus claims **functional languages**, it is inherent that television input of the receiver over cable 6 in Johnson reference performs the function of receiving a signal capable of full motion..., the signal output to television in Johnson reference performs function of providing the signal capable of full motion..., wherein the subscriber interaction in Johnson reference performs the function of modifying the full motion video content of the signalas claimed in claim 7(see MPEP 2114 - Apparatus and Article Claims- Functional Language).

Furthermore, Johnson also discloses the system controller controls the television/video signal, which includes display screen, premium channel, parental control, etc. (see including, but is not limited to, col. 15, line 4-col. 16, line 68). Johnson further channel mapping is selected by system manager at the head end. The system manager also assigned character generator screen for each channel. In response to subscriber request, the system manager/operator at the head end will either tune to the selected pay per view program/premium channel or not based on user credit, user information (e.g., guest will not receive the premium channel if their current credit is below the price of the movie) – see col. 13, line 40-col. 15, line 11, col. 16, lines 35-68,

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col. 17, line 30-col. 18, line 38, col. 19, line 64-col. 21, line 37). Johnson further discloses a default screen will be displayed while the data is requested from the system manager. When the data is received, it will be displayed (col. 15, lines 15-20). Johnson also discloses all downstream communications may be transmitted in band or within a particular television channel transmission, for example, within the horizontal or vertical intervals of transmitted video signal. Consequently, the system manager 12 accomplishes in band signaling by controlling data input into the video signals transmitted via either modulators 5 or 11 (col. 4, lines 32-49). Therefore, Johnson inherently discloses:

a television input to the home interface controller for receiving a signal **capable** of full motion video from the interactive process in response to the subscriber selection (e.g. television input to the terminal via cable link 6 receives signal including program/movie carried in channel assigned to the screen by system manager such as preview, selected video from the head end including system manager in response to user selection – see including but are not limited to see col. 13, line 40-col. 15, line 11, col. 16, lines 35-68, col. 17, line 30-col. 18, line 38, col. 19, line 64-col. 21, line 37);

a signal output for providing the signal **capable** of full motion video to the television (signal output 212 to television receiver for providing selected signal including selected movie/video to the television display – figure 2), wherein the subscriber interaction with the interactive process modifies the full motion video content of the signal **capable** of full motion video before it gets received by the television input so that changes get displayed on the television in response to the subscriber interaction (the

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system manager modifies the signal such as providing a free shows, an appropriate screen and displaying the free shows/the appropriate screen to subscriber instead of the selected pay per view movie if the system manager/operator determines the subscriber who selected the pay per view movie does not has enough credit, or the system manager enables/disables parental control feature and associated screen according to information of subscriber who request for the movie, or system manager/operator modifies/switches the preview version to full version and providing the full version of the selected movie for displaying to the subscriber if the subscriber select to purchase the movie- see including, but are not limited to, col. 13, line 40-col. 15, line 11, col. 16, lines 35-68, col. 17, line 30-col. 18, line 38, col. 19, line 64-col. 21, line 37).

Regarding claim 8, Johnson teaches a tuner (combination of Up/down converter 201 and demodulator 202- figures 2, 8 and col. 10, lines 55-63) coupled to the television input (input to the receiver via cable link 6) for tuning to the signal capable of full motion video wherein the tuner is controlled in response to either the data signal from the selection input or the interactive process (e.g. the system manager controls the tuner to tune to a predetermined channel that carries selected program based on the information of subscriber who select the movie- for example, the tuner is tuned to a channel that carries free shows or display an appropriate screen if the subscriber who request the movie does not have enough credit- see including, but are not limited to, col. 13, line 11-col. 14, line 67, col. 15, line 1-45, col. 16, lines 32-68, col. 17, lines 30-37).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (US 5,001,554) as applied to claim 7 above, and in view of Tindell et al. (US 5,130,792).

Regarding claim 9, Johnson teaches a system as discussed in the rejection of claim 7. Johnson additionally discloses a processor (up/down converter 201 and demodulator 202 – figure 2) coupled to the television input (input of channel modulator) and providing the signal to the signal output (to television receiver of TV – figures 2, 8). However, Johnson does not specifically disclose a decompressing a digitally compressed digital signal.

Tindell teaches a processor (data decompression 82) coupled to television input (e.g., input of buffer 70, input of decoder 74, input of storage interface 76, input of buffer 84, input of digital/analog converter 86, or input of signal reconstruction 88 – figure 5) for

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decompressing a digital compressed signal capable of full motion video (digital compressed video data) and providing the decompressed signal to a signal output for playing back (output of buffer 84, output of conversion 86, or output of signal reconstruction 88 - figures 5, 7 and col. 5, lines 43-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Johnson to use the teaching as taught by Tindell in order to improve efficiency in data transmission.

Regarding claim 10, Johnson teaches a system as discussed in the rejection of claim 7. Johnson further discloses providing full motion video such as pay per view video, video conference, etc. (col. 17, lines 30 –col. 18, line 8). However, Johnson does not specifically disclose provides digital full motion video.

Tindell teaches data facility provides digital full motion video (digital video programs - figures 1-3 and col. 2, lines 44-68). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Johnson to use the teaching as taught by Tindell in order to improve efficiency in data transmission.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ballantyne et al. (US 5,133,079) discloses method and apparatus for distribution of movies.

Ricketts et al. (US 3,997,718) discloses premium interactive communication system.

Jannery et al. (US 3,859,596) discloses cable television two way communication system.

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Son P. Huynh whose telephone number is 571-272-7295. The examiner can normally be reached on 9:00 - 6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher S. Kelley can be reached on 571-272-7331. The fax phone

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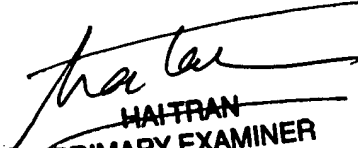
number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

It is noted that Group Art Unit 2611 has been changed to Group Art Unit 2623

SPH

April 30, 2006


HAI TRAN
PRIMARY EXAMINER